

AMENDMENTS TO THE CLAIMS

Claims 1-5, 7-11, 13 and 17 are currently amended.

63 \ 1. (currently amended) Article made of magnesium or its alloys, some or all of whose surface has [a] an electroless conversion coating, [characterized in that] wherein the conversion coating comprises MgO, Mn₂O₃ and MnO₂ plus at least one oxide from the group consisting of vanadium, molybdenum and tungsten.

2. (currently amended) Article [according to claim 1, characterized in that the] with an electroless conversion coating [is obtainable by], wherein the electroless conversion coating is prepared by a process comprising passivating the article using an aqueous passivating electrolyte which comprises potassium permanganate and at least one alkali metal salt or ammonium salt of an anion from the group consisting of vanadate, molybdate and tungstate.

3. (currently amended) Article according to claim 1, [characterized in that in addition to the conversion coating] further comprising a polymer coating [has been] applied to the electroless conversion coating [which is obtainable by polymerizing and/or crosslinking a solution], said polymer coating comprising at least one polymerized or crosslinked alkoxy silane compound.

4. (currently amended) Article according to claim 3, [characterized in that] wherein the alkoxy silane compound is of the general formula.



in which

X is an alkoxy, aryloxy or acyloxy group of 1 to 12 carbon atoms[, preferably of 1 to 4 carbon atoms, and in particular is selected from the group consisting of methoxy, ethoxy, n-propoxy, i-propoxy, butoxy, phenoxy, acetoxy and propionyloxy groups];

R¹ and R², which are identical to or different from one another, are selected from the group consisting of

- amino, monoalkylamino or dialkylamino radicals;

- alkyl radicals[, especially the alkyl radicals of 1 to 6 carbon atoms, preferably the methyl, ethyl, n-propyl, isopropyl, n-butyl, s-butyl, t-butyl, pentyl, hexyl or cyclohexyl radicals];
- alkynyl radicals[, especially the alkynyl radicals of 2 to 6 carbon atoms, preferably the acetylenyl or propargyl radicals];
- alkenyl radicals[, especially the alkenyl radicals of 2 to 6 carbon atoms, preferably the vinyl, 1-propenyl, 2-propenyl or butenyl radicals];
- aryl radicals[, especially the aryl radicals of 6 to 10 carbon atoms, preferably phenyl or naphthyl radicals];
- epoxy radicals[, especially the epoxy radicals of 3 to 16 carbon atoms, preferably the glycidyl, glycidyl ether, glycidyl ester or glycidyloxyalkyl radicals]; or group X described above; and

a and b, which are identical to or different from one another, are 0, 1, 2 or 3, the sum of a and b not exceeding 3.

5. (currently amended) Article according to claim 4, [characterized in that] wherein the alkoxysilane compound is selected from a tetraalkoxysilane, epoxyalkoxysilane or aminoalkoxysilane.

6. (original) Article according to claim 5, characterized in that the alkoxysilane compound is selected from the group consisting of tetraethoxysilane, 3-glycidyloxypropyltrimethoxysilane, 3-aminopropyltrimethoxysilane and 3-(aminoethylamino) propyltrimethoxysilane.

7. (currently amended) Article according to claim 3, [characterized in that the solution additionally comprises a compound capable of forming] wherein the polymer coating further comprises a titanium complex.

8. (currently amended) Article according to claim 7, [characterized in that the compound capable of forming a] wherein the titanium complex is a reaction product of an alkoxytitanium compound, a titanate ester or a titanium chelate and in particular is of the formula $Ti(OR)_4$ in

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which R is an alkyl radical of 1 to 6 carbon atoms [selected preferably from the group consisting of methyl, ethyl, n-propyl, isopropyl and butyl radicals].

9. (currently amended) Article according to claim 8, [characterized in that the compound capable of forming a titanium complex] wherein the alkoxytitanium compound is tetraethoxytitanate $\text{Ti}(\text{OC}_2\text{H}_5)_4$.

10. (currently amended) Article according to claim 3, [characterized in that the solution additionally] wherein the polymer coating further comprises at least one dye which is soluble in a polar solvent[, in particular a metal complex dye].

11. (currently amended) Process for producing [a] an electroless conversion coating on an article made of magnesium or its alloys, characterized in that the article is subjected to passivation using an aqueous passivating electrolyte which comprises potassium permanganate and at least one alkali metal salt or ammonium salt of an anion from the group consisting of vanadate, molybdate and tungstate.

12. (original) Process according to claim 11, characterized in that the passivation is conducted within a pH range of the aqueous passivating electrolyte of from 7.0 to 8.0.

13. (currently amended) Process according to claim 11, characterized in that the passivation is conducted at a temperature of the aqueous passivating electrolyte of from 15 to 50 °C[, in particular from 20 to 30 °C].

14. (previously amended) Process according to claim 11, characterized in that the passivation is conducted for a period of from 2 to 10 minutes.

15. (original) Process according to claim 11, characterized in that the concentration of potassium permanganate in the aqueous passivating electrolyte is from 1 to 10 g/l.

16. (previously amended) Process according to claim 11, characterized in that the concentration of the alkali metal salt or ammonium salt from the group consisting of vanadate, molybdate and tungstate in the aqueous passivating electrolyte is from 1 to 10 g/l.

17. (currently amended) Process according to claim 11, [characterized in that] further comprising applying a paint or other surface coating material [is or has been applied] to the electroless conversion coating.

18. (new) Article according to claim 4, wherein the alkoxysilane compound is of the general formula.



wherein

X is an alkoxy, aryloxy or acyloxy group of 1 to 4 carbon atoms;

R¹ and R², which are identical to or different from one another, are selected from the group consisting of

- amino, monoalkylamino or dialkylamino radicals,
- alkyl radicals of 1 to 6 carbon atoms,
- alkynyl radicals of 2 to 6 carbon atoms,
- alkenyl radicals of 2 to 6 carbon atoms,
- aryl radicals of 6 to 10 carbon atoms, and
- epoxy radicals of 3 to 16 carbon atoms.

19. (new) Article according to claim 18, wherein the alkoxysilane compound is of the general formula



wherein

X is selected from the group consisting of methoxy, ethoxy, n-propoxy, i-propoxy, butoxy, phenoxy, acetoxy and propionyloxy groups

R¹ and R², which are identical to or different from one another, are selected from the group consisting of

- amino, monoalkylamino or dialkylamino radicals;

- alkyl radicals selected from methyl, ethyl, n-propyl, isopropyl, n-butyl, s-butyl, t-butyl, pentyl, hexyl or cyclohexyl radicals;
- alkynyl radicals selected from acetylenyl or propargyl radicals;
- alkenyl radicals selected from vinyl, 1-propenyl, 2-propenyl or butenyl radicals;
- aryl radicals selected from phenyl or naphthyl radicals; and
- epoxy radicals selected from glycidyl, glycidyl ether, glycidyl ester or glycidyloxyalkyl radicals.

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